

11.02 PROPORTIONS OF MIXTURES

All Portland Cement concrete mixtures shall be composed of a mixture of Portland Cement, water, mineral aggregates, and admixtures as specified; according to Table 11.02.

The proportions within the limits given shall be determined by the Engineer and shall not be varied by the Contractor.

TABLE 11.02 - PORTLAND CEMENT CONCRETE MIXTURES														
CLASS OF CONCRETE	LB2750		SG3000		L3500		LC3500		L4500		L5500		PR	
General Use	Pavement Base ***		Sidewalk *		Pavement & Structures		Curb		Bridge Deck & High Strength		Pavement High Strength		Pavement Repair (H.E.)***	
Minimum 28 Day Strength (MPa)	19		20		25		25		31		31		31	
Kg of Cement / M³	251		335		335		336		390		446		474 **	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
Aggregate Composition by Weight														
Fine Aggregate	58%	62%	100%	-----	67%	73%	67%	73%	67%	73%	67%	73%	67%	73%
Coarse Aggregate	38%	42%	-----	-----	27%	33%	27%	33%	27%	33%	27%	33%	27%	33%
Maximum Water Cement Ratio	0.64		0.53		0.53		0.50		0.44		0.41		0.39	
	Target	Tol.	Target	Tol.	Target	Tol.	Target	Tol.	Target	Tol.	Target	Tol.	Target	Tol.
Air Content, % of Volume	5.5	1.0	7.0	1.0	6.0	1.0	6.0	1.0	6.0	1.0	5.0	1.0	5.0	1.0
Slump (mm)	64	23	76	2.5	64	38	51	25	64	38	64	38	64	38
* L3500 shall be used on all sidewalk constructed on City Contracts unless otherwise specified. ** Type III Cement *** No fly ash allowed in pavement base or pavement repair mixtures NOTE: All tolerances are plus or minus (±) values. NOTE: This table is for proportion ranges only. Actual mix design weights for specific applications will be provided by the City of Lincoln Testing Laboratory.														